

IN THE CLAIMS

Please amend the claim as follows:

1. (Currently Amended) An apparatus for drawing an optical fiber comprising:
 - a melting furnace ~~for~~ configured to melting an optical fiber preform;
 - a preform feeder ~~for~~ configured to feeding the preform to the melting furnace;
 - a capstan ~~for~~ configured to drawing ~~an~~ the optical fiber by pulling the preform from the melting furnace;
 - an outer diameter measurement unit for measuring an outer diameter of the drawn optical fiber; and
 - a control unit ~~for controlling the outer diameter of the optical fiber, wherein the control unit that includes a calculation unit, that the calculation unit being configured to receives a drawing speed signal output from the capstan; configured to calculates a first feed speed of the preform using the drawing speed signal; configured to calculates a slope of the drawing speed during a previously arbitrary period of time using the drawing speed signal; configured to obtains an expected drawing speed of a future arbitrary time period by using the calculated slope; configured to estimates a first compensation value according to a difference between the present drawing speed and a target drawing speed; configured to estimate and a second compensation value according to a difference between the present drawing speed and the expected drawing speed of the arbitrary time later; and configured to calculates a second preform feed speed based on the estimated compensation values,~~
wherein the control unit is configured to control the outer diameter of the optical fiber using the calculated second preform feed speed.

2. (Currently Amended) The apparatus as set forth in claim 1, wherein the control unit is configured to regulates the outer diameter of the optical fiber by regulating the speed of the capstan according to a signal received from the outer diameter measurement unit indicating a change in the outer diameter of the optical fiber.

3. (Canceled)

4. (Original) The apparatus as set forth in claim 3, wherein the previously arbitrary time period includes a period prior to an automatic feed by the preform feeder.

5-12. (Canceled)